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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/880,781	06/15/2001	Tsuyoshi Isozaki	IKE-C098	8970
30132	7590 08/20/2003			
GEORGE A. LOUD			EXAMINER	
3137 MOUNT VERNON AVENUE ALEXANDRIA, VA 22305			THEXTON, MATTHEW	
			ART UNIT	PAPER NUMBER
			1714	

DATE MAILED: 08/20/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

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•		Application No.	Applicant(s)					
		09/880,781	ISOZAKI ET A	L.				
	Office Action Summary	Examiner	Art Unit					
		Matthew A. Thexto	n 1714					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address								
Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM								
THE - Externanternaterna	MAILING DATE OF THIS COMMUNICATION. nsions of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. period for reply specified above is less than thirty (30) days, a reply of period for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute, eply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however within the statutory minim will apply and will expire SI cause the application to b	or, may a reply be timely filed um of thirty (30) days will be considered to ((6) MONTHS from the mailing date of the ecome ABANDONED (35 U.S.C. § 133)	nis communication.				
1) 🗌	Responsive to communication(s) filed on	<u> </u>						
2a) <u></u> ☐	This action is FINAL . 2b)⊠ Thi	is action is non-fina	al.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims								
4)⊠	Claim(s) <u>1-6</u> is/are pending in the application.							
•	4a) Of the above claim(s) is/are withdrav	vn from considerat	on.					
	Claim(s) is/are allowed.							
6)⊠ Claim(s) <u>1-6</u> is/are rejected.								
7) ☐ Claim(s) is/are objected to.								
8) Claim(s) are subject to restriction and/or election requirement.								
Application Papers								
9) The specification is objected to by the Examiner.								
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.								
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
11) ☐ The proposed drawing correction filed on is: a) ☐ approved b) ☐ disapproved by the Examiner.								
If approved, corrected drawings are required in reply to this Office action.								
12) The oath or declaration is objected to by the Examiner.								
Priority under 35 U.S.C. §§ 119 and 120								
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).								
a)⊠ All b)□ Some * c)□ None of: —								
	1. Certified copies of the priority documents have been received.							
	2. Certified copies of the priority documents		• • • • • • • • • • • • • • • • • • • •					
Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.								
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).								
a) ☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.								
Attachment(s)								
2) 🔲 Notice	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449) Paper No(s) <u>2</u>	5) 🔲 N	terview Summary (PTO-413) Paper otice of Informal Patent Application ther:					

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DETAILED ACTION

Information Disclosure Statement

The information disclosure statement (IDS) submitted on 15 June 2001 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement has been considered by the examiner. Duplicate listings have been lined through.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 1. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishikawa et al. (US 4051194).

Claim 1 requires copolymerizing 5-90 weight percent of glycidyl or methylglycidyl group containing unsaturated compounds with 95-10 weight percent ethylenically unsaturated monomer in methanol, and spray drying to obtain powdery resin. Claim 2 requires the methanol be present in the resin solution at 5-99.99 weight percent. Claim 3 depends from claim 1 and requires the orixane containing monomers be selected from glycidyl acrylate and glycidyl methacrylate and methylglycidyl acrylate and methylglycidyl methacrylate. Claim 4 depends from claim 1 and requires the ethylenically unsaturated monomer be selected from a list which includes styrene.

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The reference discloses copolymerizing 10-40 weight percent beta-methylglycidyl(meth)acrylate optionally with glycidyl(meth)acrylate with 20-80 weight percent styrene in solution polymerization in an organic solvent which dissolves the resulting polymer, such as methanol (column 3, lines 27-36), and spray drying to obtain the solid polymer (column 3, lines 37-39). This disclosure broadly encompasses claims 1-4. It is well established by the courts that where the general conditions of the claims are disclosed in the prior art, it is not patentable to discover optimum or workable ranges (e.g., concentrations, temperature, pH, etc.) by routine experimentation, absent evidence of unexpected results (<u>In re Aller, et al.</u>, 105 USPQ 223 (CCPA 1955); <u>In re Boesch</u>, 205 USPQ (CCPA 1980)).

Claim 5 depends from claim 1 and requires adding one or more of curing agents, pigments, and additives before spray drying. The reference discloses adding pigments and other additives by known methods such as obtaining a uniform mixing of the entire paint powder with a solvent and then spray drying (column 3, line 65, to column 4 line 14). This suggestion appears to encompass claim 5.

Claim 6 depends from claim 1 and requires that a methanol solution or dispersion of one or more of curing agents, pigments, and additives be mixed with the resin solution before spray drying using a continuous mixer. The expedient of predissolving or dispersing additives to be mixed with a solution is notoriously well known. The use of a continuous mixer is notoriously well known. Such choices would be immediately obvious to one of ordinary skill in the art given the suggestions of the reference at column 3, line 65, to column 4 line 14.

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Citation of Pertinent Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Victorius (US 4027066) discloses the well known techniques of admixing the desired pigments, crosslinkers, additives to the solution polymerized resin solution and then spray drying to the desired particle size (Column 5, lines 46-59).

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew A. Thexton whose telephone number is 703-305-5085. The examiner can normally be reached on Monday-Friday, 8:30 to 6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasudevan S Jagannathan can be reached on 703-306-2777. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

> Matthew A. Thexton Primary Examiner

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